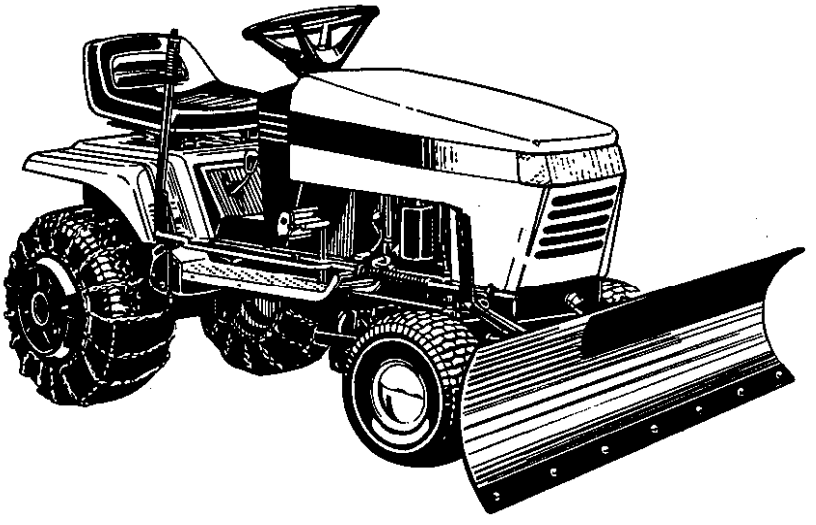
OPERATOR'S MANUAL

42" Snow Plow/Dozer Blade

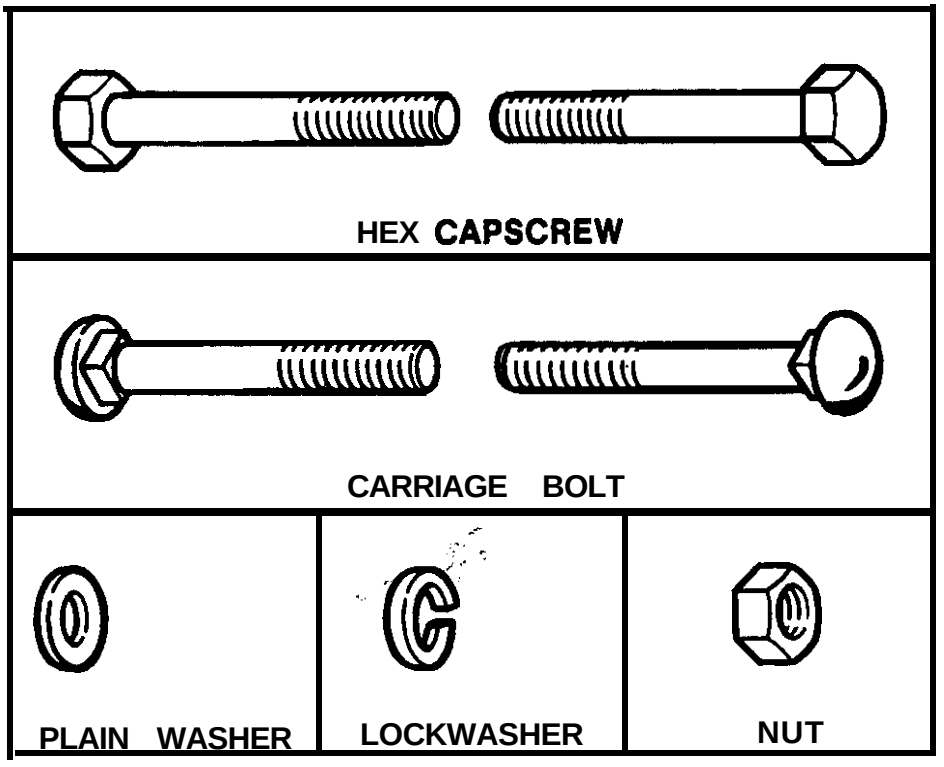
(42" Blade), Mfg. NO. 1691520

(Hitch Assembly), Mfg. No. 1692240



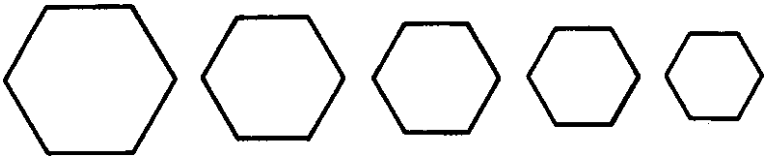
Simplicity®

STANDARD FASTENER IDENTIFICATION CHART

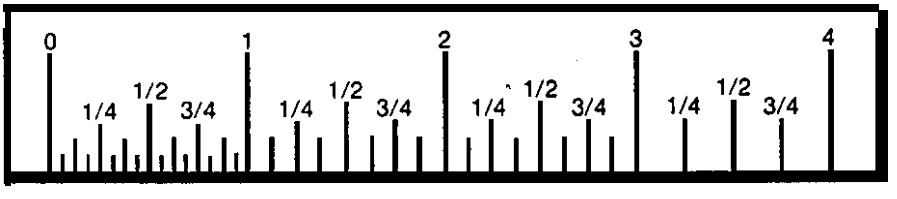


HEX CAPSCREW IDENTIFICATION

Shown below are actual size heads for standard screw sizes. Example: a 1/4 screw has 7/16 head and thus requires a 7/16 wrench. To measure length, use the scale below.



3/4" Head screw with 1/2" S.D. | 5/8" Head screw with 7/16" S.D. | 9/16" Head screw with 3/8" S.D. | 1/2" Head screw with 5/16" S.D. | 7/16" Head screw with 1/4" S.D.



WASHER AND NUT IDENTIFICATION

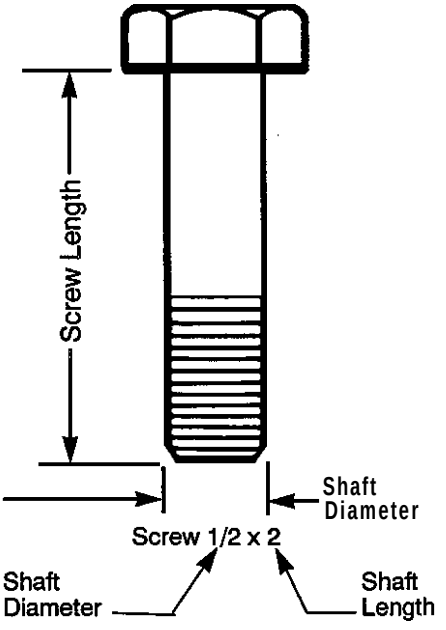
Place the washer or nut on the above scale to determine the inside diameter. The actual inside diameter can vary 1/16 inch. Use the scale for comparison.

Hardware sizes given in the illustrations throughout this manual.

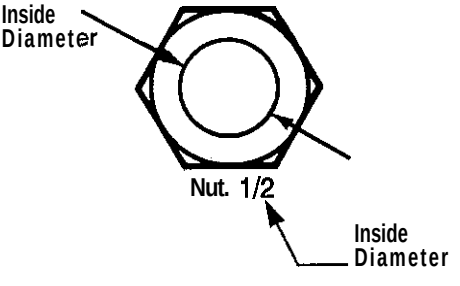
If a washer or nut is identified as "washer, 1/2" or "nut, 1/2", this means the inside diameter is 1/2 inch

If a screw is identified as "screw, 1/2 x 2", this means the shaft diameter is 1/2 inch and the shaft of the screw is 2 inches long. If a screw is identified as "screw, 1/2 - 16 x 2", the number "16" means that the screw has 16 threads per inch.

SAMPLE: SCREW IDENTIFICATION



SAMPLE: NUT IDENTIFICATION



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Accessories

For best performance, it is recommended to use tire chains and two (2) rear wheel weights. A rear-mounted weight box can also be added for additional traction. The maximum weight added to the tractor should not exceed 35 lbs./wheel plus 100 additional pounds in the rear weight box.

A Snow Cab is available to protect operator from winter weather.

Safety Rules

Read these safety rules and follow them closely. Failure to obey these rules could result in loss of control of vehicle, severe personal injury to yourself or bystanders, or damage to property or equipment. The ***triangle*** *in the text signifies important cautions or warnings which must be followed.*

ALL WARNING, CAUTION, and instructional messages on this attachment and on your tractor should be carefully read and obeyed. Personal bodily injury can result when these instructions are not followed.

GENERAL

*Read the operators manual carefully. Be thoroughly familiar with the controls and proper use of the equipment. Know how to stop the unit and disengage the controls quickly.

*Never allow children to operate the machine. Do not allow adults to operate it without proper instruction.

•Keep the area of operation clear of all persons, particularly small children and pets.

•Do not carry passengers.

*Make sure:

a. tractor and attachments are in good operating condition.

b. all safety devices and shields are in place

c. and in good working condition, and

d. all adjustments (skid shoe height, etc.) have been made.

PREPARATION

*Handle gasoline with care-it is highly flammable.

a. Use approved gasoline container.

b. Never remove the cap of the fuel tank or add gasoline to a running or hot engine, or fill the fuel tank indoors. Wipe up spilled gasoline.

•Do not run the engine indoors. Exhaust fumes are dangerous.

*Shift into neutral before attempting to start the engine.

•Wear proper footwear. Do not operate tractor when barefoot or when wearing open sandals or canvas shoes.

OPERATION

• Do not allow anyone to use the snow plow/dozer blade unless they have been instructed on how to operate it safely.

• Never attempt to adjust, repair or service the snow plow/dozer blade while the tractor engine is running.

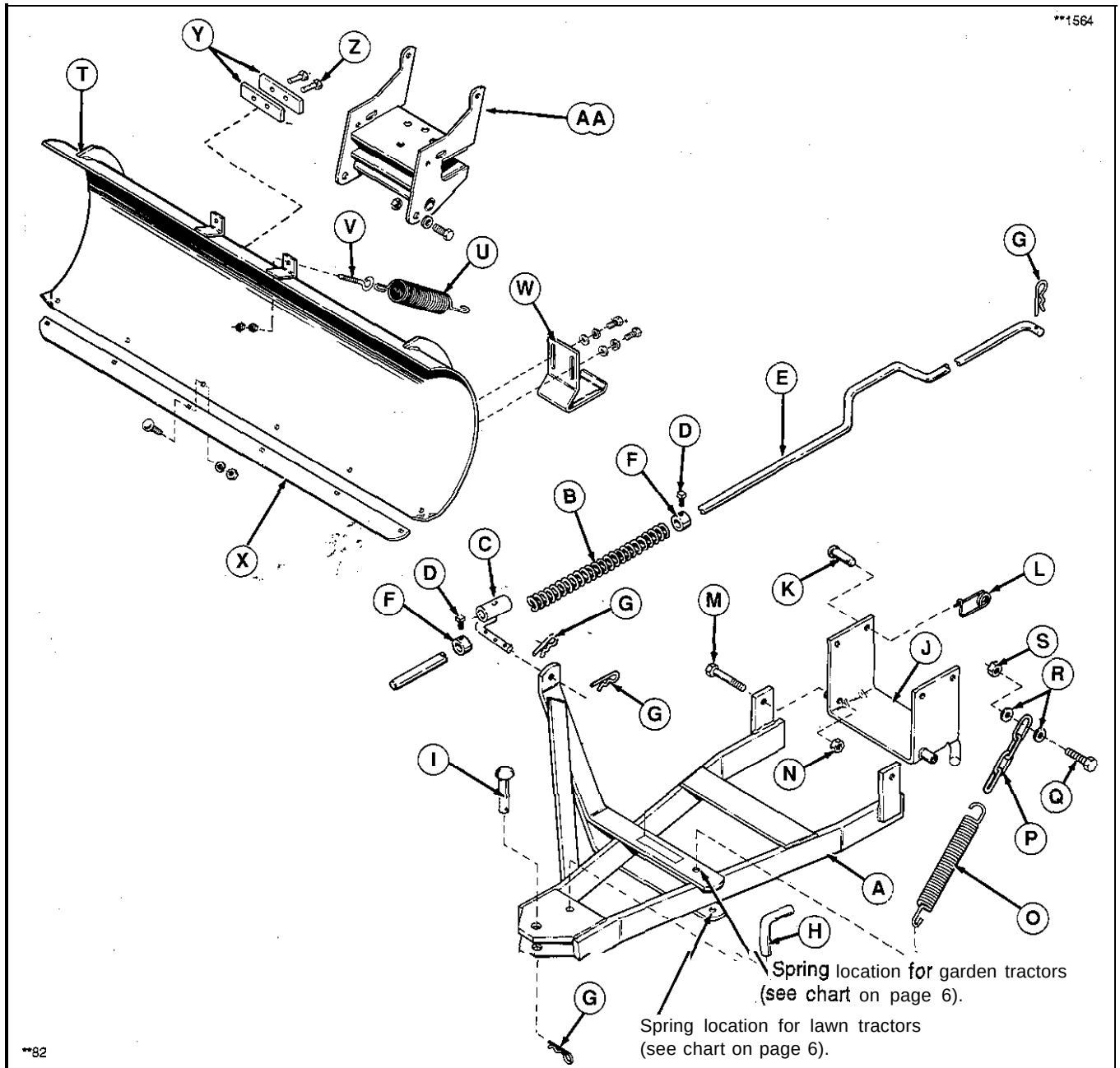
•Do not allow others near the snow/dozer blade while it is being used.

*Use the snow plow/dozer blade only in daylight, or good artificial light.

*Always lower the snow plow/dozer blade completely to the ground when leaving it unattended to prevent it from being accidentally lowered and causing injury. Make sure blade is locked in "DOWN" position due to spring-assist.

*Always operate the tractor at reasonable speeds to prevent the blade from catching an object and stopping the tractor abruptly.

PARTS ILLUSTRATION



gure 1.

Ref. NO.	Qty.	Description
A	1	BAR ASSY., Push
B	1	SPRING
C	1	GUIDE ASSY., Rod
D	2	SETSCREW, 5/16-18 x 1/2
E	1	ROD., Lift
F	2	COLLAR, Set
G	4	SPRING, Clip
H	1	PIN, Pivot
I	1	PIN, King
J	1	BRACKET ASSY.
K	4	PIN
L	4	CLIP, Pin
M	2	CAPSCREW. 3/8-16 x 2-1/4
N	2	LOCKNUT, 3/8-16

Ref. NO.	Qty.	Description
0	1	SPRING
P	1	CHAIN, 4-Link
Q	1	CAPSCREW, 5/16-18 x 1-1/4
R	2	WASHER, Flat, 5/16
S	1	LOCKNUT. Hex. 5/16-18
T	1	B L A D E
U	1	TRIP ASSY., Spring
V	1	EYEBOLT
W	1	SHOES, Skid (Assembled)
X	1	PLATE, Wear (Assembled)
Y	1	STOP, Bar
Z	1	SCREW, Taptite
A A	1	FRAME, Pivot

42" Snow Plow/Dozer Blade

ASSEMBLY

1. Place the blade on a flat surface.
2. **install two bar stops (A, figure 2) using the two** 5/16-18 x 1" taptite screws (B).

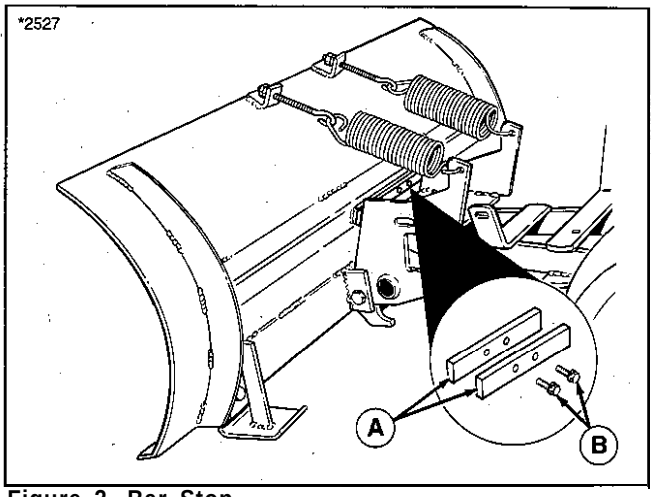


Figure 2. Bar Stop
A. Bar Stop
B. Taptite Screw, 5/16-18 X 1

3. Insert eyebolt (A, figure 3) thru lug on blade and screw on 5/16 nut (B) only far enough so that it is flush with the end of the eyebolt.
4. Hook the spring (C) into the pivot frame (D). Stretch the spring with a pliers to hook springs on eyebok (A).
5. Repeat steps 3 and 4 for the other spring
6. Tighten the nut (B) on both eyebolts down to expose about 3/4" (19 mm) of thread.
7. Add the other nut (E) to each eyebolt. Hold the first nut (B) secure with a wrench and tighten the second nut (E) securely on each eyebolt.

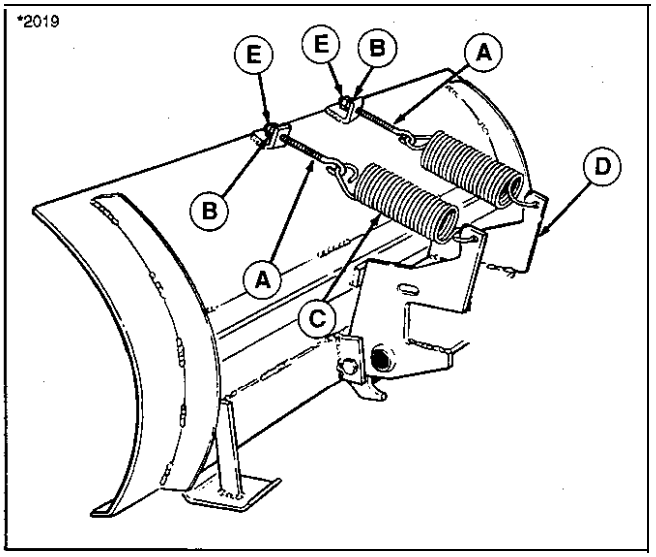


Figure 3. Tension Springs
A. Eyebolt
0. Nut, 5/16
C. Spring
D. Pivot Frame
E. Nut, 5/16

8. Assemble the chain (A, figure 4) to the tractor as follows:

a. On left-hand side, remove the upper self-tapping screw that holds bumper to frame. This is the hole used for installing chain in the following steps, using one 5/16-18x 1-1/4 capscrew (B), two 5/16 washers (D), and one 5/16 locknut.

b. Place one 5/16 washer onto the screw. Then place the chain on the capscrew, and then the other 5/16 washer.

c. Insert the capscrew (B, figure 4) as shown. From inside frame, install 5/16 locknut onto capscrew. Tighten snug only at this time. The spring (C) will be installed in "Installation" section (step 6), and hardware will be tightened.

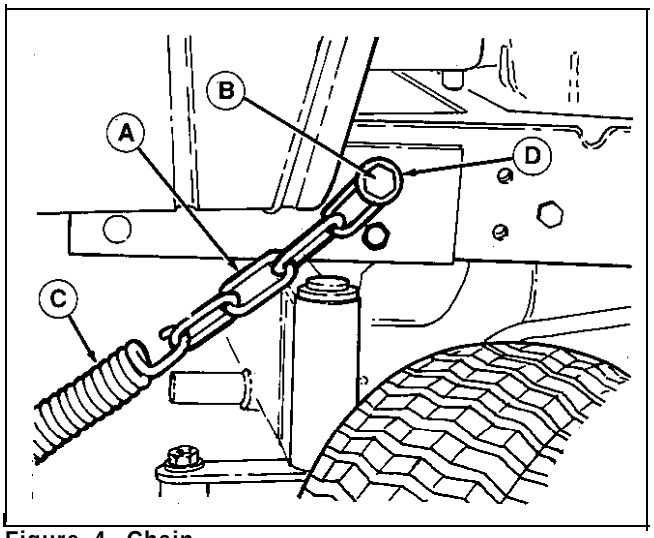


Figure 4. Chain
A. Chain
B. Capscrew
C. Spring
D. Flat Washer

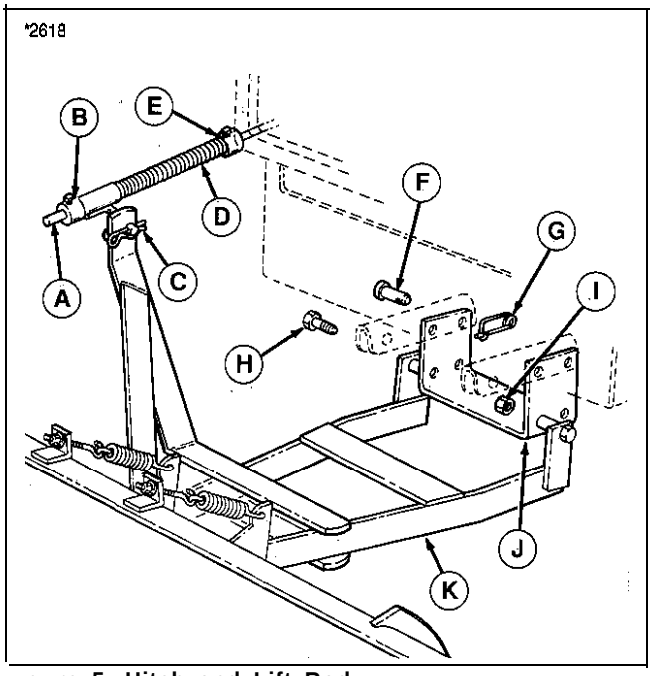
INSTALLATION

1. Drive the tractor over the push bar until rear of push bar is under front hitch.

2. Stop engine, remove key and set parking brake.

3. Attach the bracket (J, figure 5) to the two rear holes in the tractor hitch with the four pins (F) and safety clips (G) provided. Insert the pins from the outside. Make sure the push bar mounting holes (in the bracket) are toward the front.

4. Attach the push bar to the bracket, using the two 3/8-16 x 2-1/4 capscrew (H) and 3/8 locknuts (I) provided.

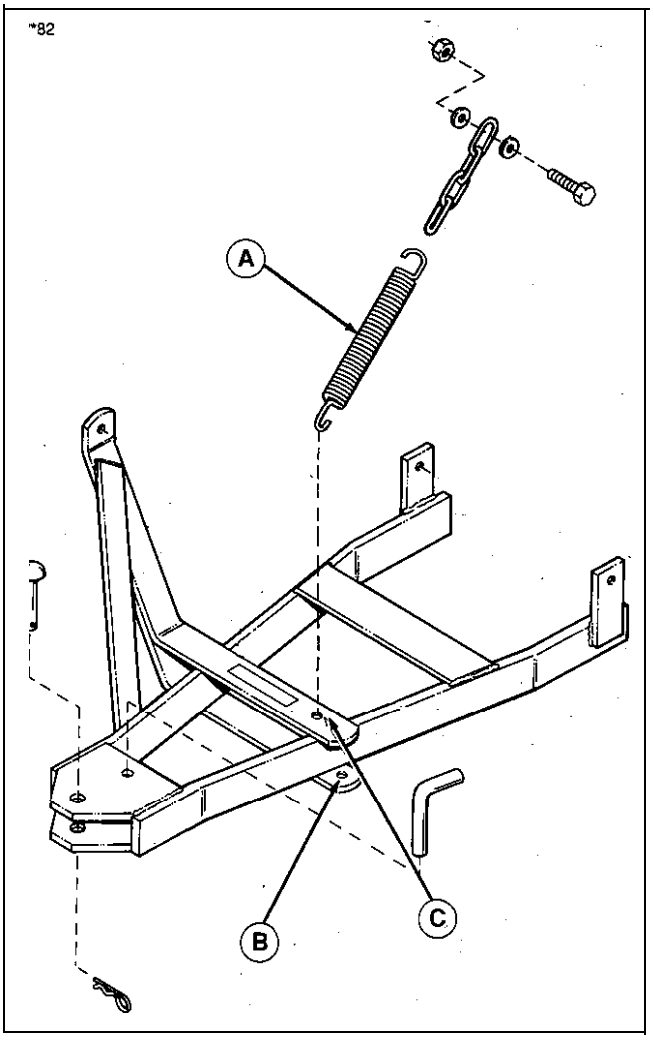


gure 5. Hitch and Lift Rod
Lift Rod
Front Set Collar
Spring Clip
Spring
Rear Set Collar
Pin
G. Safety Clip
H. Capscrew. 3/8-16 x 2-1/4
I. Locknut, 3/8-16
J. Bracket
K. Push Bar

5. Raise the push bar and hook up the spring (A, figure 6) in location B or C as follows:

Location	Tractor (Series)
B	4000, 5000, 500, 600, 12LT. 12RT. Regent
C	6000,800, 16GTH, 17GTH

6. Lower the push bar and tighten the capscrew and nut which hold chain to tractor frame.



gure 6. Lift-Assist Spring

Spring

Spring Location-Lawn Tractors (See Chart)

Spring Location – Garden Tractors (See Chart)

7. Insert front of push bar (A, figure 7) into pivot frame on rear of blade. Then install king pin (C) down thru holes in hitch and pivot frame. Secure king pin (C) with spring clip (D).

8. Using king pin as the pivot, swivel push bar to align holes for pivot pin (E). Then install pivot pin downward thru holes in blade and push bar. The pivot pin can be installed in any of three holes, depending on desired blade angle.

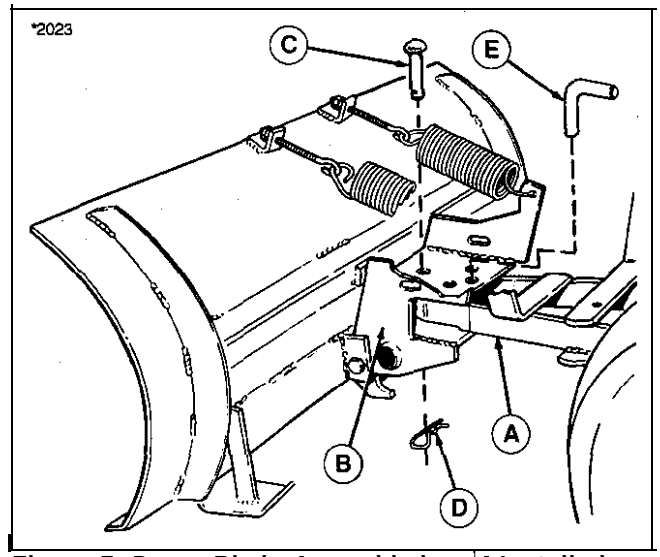


Figure 7. Dozer Blade Assembled and Installed
A. Push Bar
B. Pivot Frame
C. King Pin
D. Spring Clip
E. Pivot Pin

9. Assemble lift rod as shown in figure 8. (The exploded view illustration is shown in figure 1.) Insert tip of rod guide (A, figure 8) thru hole in lift arm (B) of push bar. Trap the rod guide on each side of lift arm with spring clips (C and D).

10. Connect rear of lift rod to lift lever mounted on tractor using the spring clip.

11. Perform adjustments, see page 9.

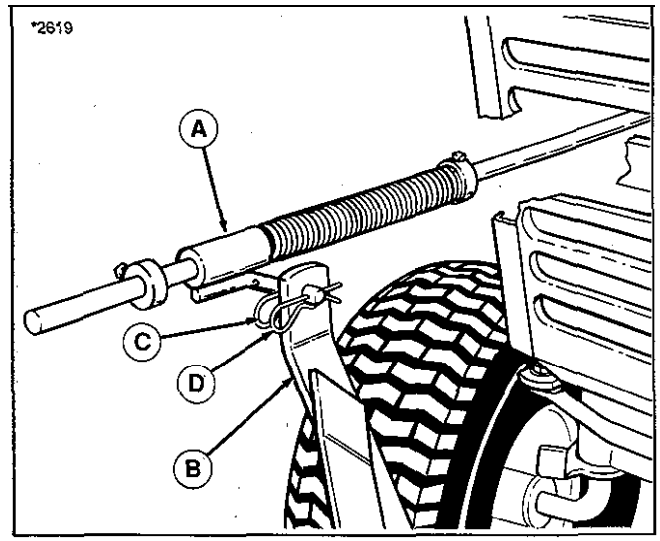


Figure 8.
A. Rod Guide
B. Lift Arm (Push Bar)
C. Outer Spring Clip
D. Inner Spring Clip

42" Snow Plow/Dozer Blade

REMOVAL

1. Lower the blade,
2. Remove blade and lii rod from push bar.
3. Raise push bar and unhook the spring (A, figure 6) from the chain.
4. Disconnect the lift rod from the lift lever on tractor by removing the spring clip.
5. Remove the bracket (J, figure 5) from the tractor hitch by removing four pins and safety clips.
6. Reinstall all pins (king pin, pivot pin, clevis pins) and secure with spring or safety clip for storage.

OPERATION AND NORMAL CARE

Transporting

For maximum ground clearance, transport the blade to and from work areas fully raised and angled straight ahead.

> **A WARNING**
>
> Be particularly careful and operate at low tractor speeds in any area where the blade can hook on solid objects. Such objects can cause the tractor to be jarred or come to an abrupt stop.

Operation On Slopes

Never operate on slopes greater than 30 percent (16.7") which is a rise of 3' (91 cm) in 10' (305 cm) forward. Use two rear wheel weights (one per wheel) when operating on slopes greater than 20 percent (11.3").

Always operate up and down the face of slopes, and never across the face. Use a slow ground speed on slopes.

Dozing and Snow Plowing

When dozing, push the dirt to the desired location, then drag the blade backwards for final leveling. Pack down the dirt or gravel by driving the tractor over the leveled area.

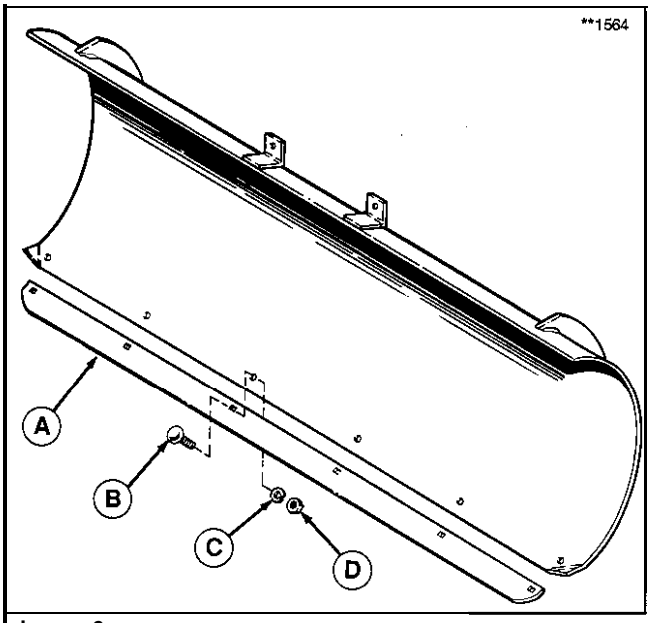
Use any grade to your advantage. Plow downhill and set the blade angle so that plowed material (especially snow) is moving downhill as it leaves the blade. For large drifts of snow, bite off small amounts instead of plowing a full blade width.

Always use full engine throttle and use the ground speed control lever to control ground speed and obtain the needed power to move the material. Operate at a safe speed, depending on conditions, so that you have complete control of the tractor. Rear wheel weights and chains are recommended for slippery surfaces.

Normal Care

After dozing jobs, hose down the blade to remove excess dirt. Coat bare metal surfaces to prevent rusting. Lightly oil all pivot points.

If the wear plate (A, figure 9) on the bottom of the 42" blade is worn excessively, replace it with a new one by removing the six carriage bolts (B), lo&washers (C) and nuts (D).



igure 9.
. Wear Plate
. Carriage Bolt, 3/8-16 x 1
Lockwasher
Nut

ADJUSTMENTS

Lift Rod

For initial setting, place front set collar (A, figure 10) 1" from rod guide with blade fully lowered. Place rear set collar (B) against spring (C). Tighten the setscrews in the two set collars. To adjust, perform the following:

1. Fully raise the blade by raising on the tractor lift lever. Measure distance between scraper bar and ground. If it measures approximately 6", it is prop erly adjusted. If not, proceed to step 2.
2. Lower the blade. Loosen the setscrew in the front set collar. Move the set collar back to increase clearance or forward to decrease clearance. Tighten the setscrew. Recheck the measurement.

MOTE: Different ground contours may require different adjustments. Lower the blade to adjust rear set collar. Moving the rear set collar toward rear will allow the blade to follow a rolling contour. The farther back the rear set collar is positioned, the more the blade will float. Moving the rear set collar toward the front will increase blade down pressure.

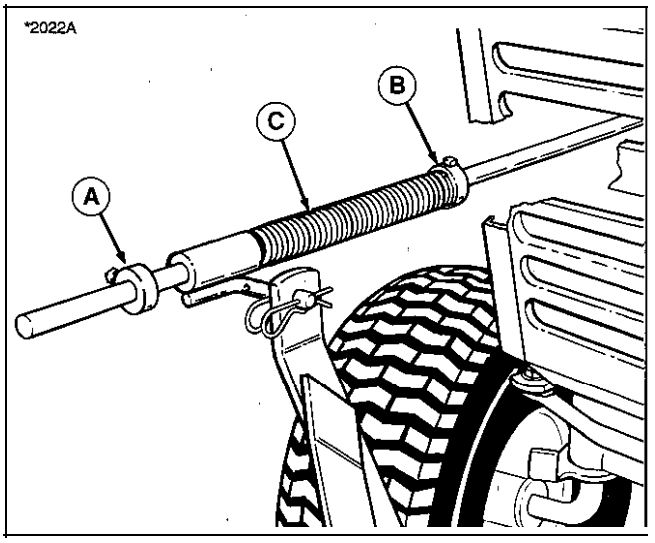


Figure 10.
A. Front Set Collar
B. Rear Set Collar
C. Spring

Skid Shoes

Alternate holes are provided to permit adjustment of the shoe assemblies for raising and lowering the blade to various working heights (see figure 11). When cleaning snow from gravel or earth drives or walks the shoe assemblies should be lowered fully to prevent blade contact with gravel or ground. When cleaning smooth hard surfaces, like concrete, the shoe assemblies are normally placed fully up to allow the blade to scrape the surface.

To adjust the skid, raise the blade off the ground and block with a piece of wood. Loosen the capscrews (A, figure 11) and move the skid shoes (B) up or down to desired height. Tighten the capscrews securely.

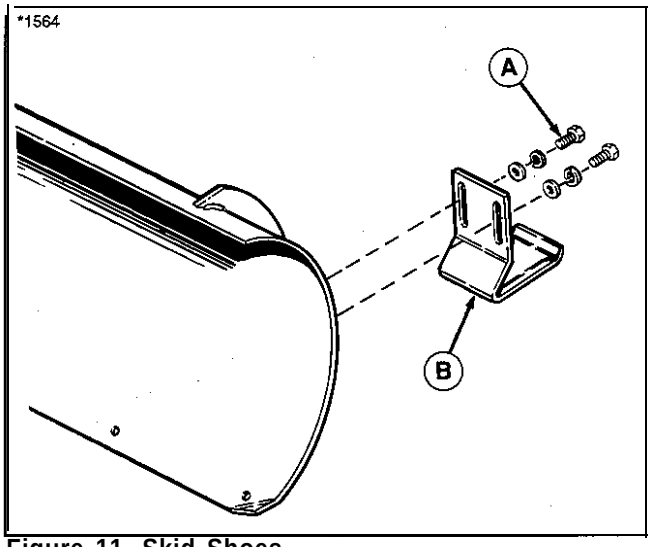


Figure 11. Skid Shoes
A. Capscrews, 3/8-16 x 3/4
B. Skid Shoes

Blade Angle

To adjust the angle of the blade, proceed as follows:

1. Lift the blade off the ground using the tractor lift lever.
2. Remove the pivot pin (H, figure 1 and E, figure 7), move the blade to desired angle and reinstall the pivot pin in a diierent hole.

Spring Tension

This snow plow/dozer blade is spring loaded so that when the blade strikes a solid object, the springs will allow the blade to release as shown in figure 12 rather than cause damage. The blade will go back to original position after object is cleared.

To adjust spring tension, hold rear nut (A, figure 12) and loosen front nut (B). Tighten rear nut (B) to increase spring tension or loosen nut to decrease spring tension. Tighten front nut (B) so the two nuts are drawn firmly together.

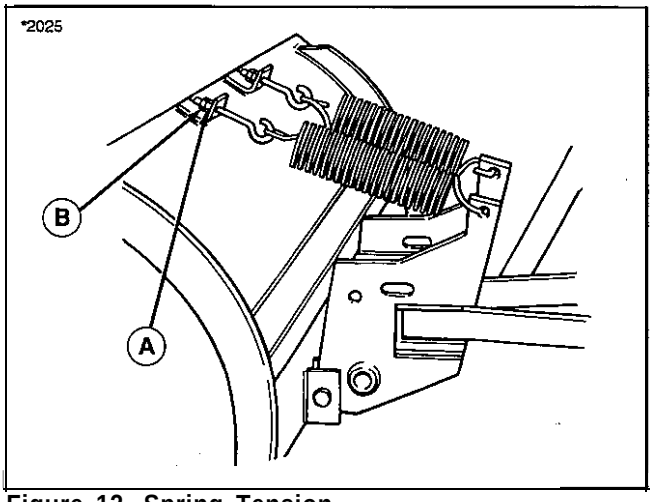


Figure 12. Spring Tension
A. Adjustment Nut (Rear)
B. Jam Nut (Front)

NOTES

NOTES

TORQUE SPECIFICATIONS FOR STANDARD MACHINE HARDWARE TOLERANCE ±20%

SEE	SAE GRADE #2		SAE GRADE #5		SAE GRADE #8	
	In./Lbs. / Ft./Lbs.	N m .	In./Lbs. / Ft./Lbs.	Nm.	In./Lbs. / Ft./Lbs.	Nm.
a-32	19	2.1	30	3.4	41	4.8
8-38	20	2.3	31	3.5	43	4.9
10-24	27	3.1	43	4.9	80	8.8
10-32	31	3.5	49	5.5	68	7.7
1/4-20	88	7.8	8	10.9	12	18.3
1/4-28	78	8.8	10	13.8	14	19.
5/16-18	11	15.	17	23.1	25	34.
5/16-24	12	18.3	19	25.8	25	34.
3/8-16	23	27.2	30	40.8	45	81.2
3/8-24	30	31.3	35	47.8	50	68.
7/16-14		40.8	50	68.	70	95.2
7/16-20	35	47.8	55	74.8	80	108.8
1/2-13	50	68.	75	102.	110	149.8
1/2-20	55	74.8	90	122.4	120	183.2
9/16-12	85	88.4	110	149.8	150	204.
9/16-18	75	102.	120	183.2	170	231.2
5/8-11	90	122.4	150	204.	220	299.2
5/8-18	loo	138.	180	244.8	240	328.4
3/4-10	180	217.8	280	353.8	388	525.
3/4-16	180	244.8	300	408.	420	571.2
7/8-9	140	190.4	400	544.	800	816.
7/8-14	155	210.8	440	598.4	660	897.6
l-a	220	299.2	580	788.8	900	1,224.
1-12	240	328.4	840	870.4	1,000	1,380.

NOTE:

1. These torque values are to be used for all hardware excluding: locknuts, self-tapping screws, thread forming screws, sheet metal screws and socket head setscrews.
2. Recomended seating torque values for locknuts:
   a. For prevailing torque locknuts. use 65% of grade 5 torques.
   b. Forflange whizlock nuts (and screws) ▪ use 135% of grade 5 torques.
3. Unless otherwise noted on assembly drawings all torque values must meet this specification.

BOLT HEAD MARKING S.A.E. GRADE:

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